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A hydrozoan interpretation of Palaeoaplysina (enigmatic organisms) based on the canal arrangement and structure

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Abstract

The study of the canal system of the enigmatic organism Palaeoaplysina Krotov, 1888 suggests a hydrozoan origin for these fossils. It is shown that the Palaeoaplysina canal system consists of three zones and can be interpreted as hydrorhizae that had their own function and morphology in each zone. In the basal part of the colony, the hydrorhizae consist of disconnected parallel stolons. It is possible that a soft body was attached to the substrate in the event of adverse environmental conditions to survive a diapause. In the central zone of the colony the hydrorhizae are strongly branched. That was the zone responsible for feeding. The terminal part of the colony has a characteristic reticulum of hydrorhizae and strongly branched dendritic shoots with hydrants. Hydrorhizae worked as a distributary system transporting nutrients between zooids. © 2014 Pleiades Publishing, Ltd.

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Keywords

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